Richard Devlin Chair Oregon

> **Ted Ferrioli** Oregon

Guy Norman Washington

Patrick Oshie Washington



Bo Downen Vice Chair Montana

Jennifer Anders Montana

> Jim Yost Idaho

Jeffery C. Allen Idaho

Council Meeting Minutes Council Central Offices Portland, Oregon

Tuesday, March 17, 2020

Chair Richard Devlin called the meeting to order at 1:03 p.m. Council Members Jennifer Anders, Ted Ferrioli, Jeffery Allen, Bo Downen, Guy Norman, Patrick Oshie and Jim Yost joined by phone.

The meeting was shortened and held as a webinar due to the coronavirus health emergency.

Reports from Fish and Wildlife, Power and Public Affairs committee chairs

Fish and Wildlife Committee

Council Member Norman, Fish and Wildlife Committee chair, reported on three agenda items:

Cost savings – Staff reported an accounting of available funds for fiscal year 2020.
 There are some differences between Bonneville's and the Council's accounting.
 Staff laid out criteria for funding projects in 2020. They have to be high priority, have received ISRP review, recommended by the Council and be able to be implemented (which means the contracts are in place).

There are two projects meeting that criteria:

An ocean research project with proposed funding to increase \$1.5 million per year. Bonneville is currently funding it at \$1.27 million, so it would be an additional \$200,000.

The other project is to bring the northern pike suppression funding up to recommended levels. Staff is planning to meet with BPA between now and the next Council meeting to resolve accounting difference, and to land on project recommendations to present to the full Council in April.

- 2. Washington Department of Fish and Wildlife and NOAA fisheries projects on Columbia River eulachon – Research on the Columbia to manage abundance in season. For the 2020 run, there's a preliminary estimate of 7.5 million pounds of smelt in the Columbia, which would be a decent return. The harvest to date in the Cowlitz River totals 69,000 pounds. NOAA is using a stoplight evaluation method for ocean conditions.
- 3. Columbia Estuary Ecosystem Restoration program The project focuses on reconnecting flood plain for use by juvenile salmonids. Since 2007, more than 13,000 acres have been restored. In 2019, 500 acres were restored. The Steigerwald restoration project in Washington is set for June 2020. It is for 500 acres. There was a report by the Corps of Engineers on the monitoring aspects of the program. One aspect is to monitor its use by specific species using PIT-tag arrays. The direct and indirect benefits of these projects include prey production and the transport of prey to increase the food web in the mainstem Columbia. The action agencies in the 2019 BiOp called for the restoration of an average of 300 acres per year.

Power Committee

Council Member Oshie, Power Committee chair, said they may have to reconsider the 2021 Power Plan timeline given the possible impact of Covid 19 on efficiency. The objective still is to get it out on time, but we want that on the table, he said.

The committee looked at energy efficiency supply curves for the Power Plan, including the draft conclusions for each element of energy efficiency supply availability. They will be updated before the final is presented to the committee. The current estimates are different than what is in Seventh Power Plan.

Tina and John presented the demand response supply curves for the draft Power Plan, which will be made available for the Regional Portfolio Model. Staff looked at 20 demand response products in three categories: residential direct load control, nonresidential direct load control and priced-based demand response, which are time-of-use rates or peak-pricing rates. In the latter, the consumer is reacting to an economic incentive instead of the utility making the decision.

Most of the discussion was around an estimate of demand voltage reduction (DVR) supply availability capability, versus conservation voltage reduction (CVR) availability. BPA is working on a recommendation to the committee to follow guidelines they have agreed to. What may come out of those discussions is what is the real availability of DVR and CVR. CVR is the installation of equipment that allows utility to lower system voltage to operate on the edge of lower voltage, saving utilities up to 3% of energy efficiency. The question is whether utilities will continue to move forward to adopt that technology and achieve the conservation. BPA has its opinion on what the results might be over the 20-year life of the Plan and staff has its conclusions. BPA and staff will work to come up with acceptable, reasonable conclusions.

They discussed when committee members get a look at key issues in the Power Plan and have an opportunity to weigh in before the draft is released for a final review. Other members will get an opportunity to weigh in as well, Member Oshie said.

Member Oshie praised the work of Charlie Grist, conservation services manager, who has been working in energy efficiency for 40 years, as well as senior energy analysts Tina Jayaweera and Steve Simmons.

Public Affairs

Council Member Jeffery Allen, Public Affairs Committee chair, said they met last month and discussed the Congressional Tour. They have secured a location in Montana. In addition, the committee:

- Reviewed the Public Affairs annual workplan. It was going to be approved this
 month, but they're not meeting.
- Looked at historical expenditures for Public Affairs. No decisions were made.
- Public Affairs is working on a letter to members of Congress with Public Affairs Division director Mark Walker.

1. Council decision on Addendum Part 2

John Shurts, general counsel, introduced the topic. Last January, the Council approved Part II of Addendum to the Fish and Wildlife Program. Before the Council at this meeting for approval is a document that includes findings on recommendations and responses to comments. Under the Northwest Power Act, if the Council doesn't adopt a recommendation, it needs to explain its reasons for doing so as part of the program. The Council also uses the document to explain how it handled all of the recommendations and responded to comments on the recommendations and on the draft program. The end result is the large

document that is before you now. He sent the members a draft in late February. He did receive comments and concerns from the Idaho members on blocked area mitigation. Staff proposed some edits that address the concerns without affecting the substance of the response, and the edited version is what you have in front of you today. He said he was informed that the Idaho members were able to support the findings as revised.

Member Devlin called for questions. There were none.

Motion to Approve the Findings on Recommendations/Responses to Comments to Complete the Adoption of Part II of the 2020 Addendum to the 2014 Fish and Wildlife Program

Member Downen moved that the Council approve the findings on recommendations and responses to comments as presented by staff to complete the adoption of Part II of the 2020 Addendum to the 2014 Fish and Wildlife Program.

Member Norman second.

The motion required a roll call vote.

Member Devlin remarked that although the Council is spending a few moments on this motion, hundreds of hours have been spent reviewing this document.

Member Norman: Aye Member Oshie: Aye Member Allen: Aye Member Yost: Aye Member Anders: Aye Member Downen: Aye Member Ferrioli: Aye Member Devlin: Aye

2. Briefing on analytical process

Ben Kujala, Power Division director, continued his presentation started last February on the components used to build the 2021 Power Plan. In that presentation, he talked about the natural gas price forecast, natural gas load forecast, regional transportation fuel consumption forecast, environmental costs and benefits of a new resource, how they develop generating resource reference plants, developing energy efficiency supply curves and other topics.

He began this session with a discussion on developing demand response supply curves. He said they define demand response as a nonpersistent intentional change in net electricity usage by end-use customers from normal consumptive patterns in response to a request on behalf of, or by, a power and/or distribution/ transmission system operator. This change is driven by an agreement, potentially financial, or tariff between two or more participating parties.

What is the technical potential of the region to implement this process? Getting 100 percent is not feasible, he said. The Council is looking at what is achievable and the cost of obtaining that. He discussed the process of how to estimate the potential. Direct control water heaters would be a "bottom-up" method for implementing demand response, while curtailing a percentage of load would be a "top-down" approach.

Kujala next discussed forecasting electricity prices. He said the Council uses the AURORA model to simulate the dispatch of power plants and calculates a price for each balancing authority. In addition, it simulates building new power plants based upon plant retirements and additions, system adequacy, and state and regional policies (such as RPS, clean resource policies, and cap and trade). It forecasts electricity prices to help estimate market impacts on requirements for regional resource adequacy, and to estimate the risk of resource expansion. For example, adding a large amount of solar could have some stacking risk.

He said while the Power Plan is about Northwest, the region is impacted by resources around us. So the Council looks at the entire WECC. It looks at the Western Electric Grid,

Staff looks at each area's capacity and the of amount of energy they can generate. They get more information out of California than they do the Desert Southwest. Kujala said that retirements is a theme we'll see throughout the plan. They also want to have a sense of the transmission system for importing and exporting power, plus the cost of it, such as wheeling charges. Historical operations, annual emissions, existing policies, such as renewable portfolio standards and clean energy policies, are factored in as well.

Shurts remarked that this is the place where you can see the impact of the Fish and Wildlife program.

Member Yost said that when the Council did the Seventh Plan, there wasn't a complete a diagram on the west side. Was that detail added for Idaho and Montana? Yes, a new typology provides better detail of internal transmission, Kujala said. Puget is another area where barriers are shown.

Yost observed it's a little different with Montana energy flowing west, and Southern Idaho energy flowing west and south. We'll need that capability for the 2021 plan, he said. Kujala agreed, especially where new resources might come in Southern Idaho and Montana.

Why does the Council forecast electricity prices? Kujala said it's to help estimate market impacts on requirements for regional resource adequacy. Also, it informs the estimate of risk for regional resource expansion. For example, adding a lot of solar could pose some stacking risk.

Next, he addressed establishing market supply curves for adequacy analysis. He said they simplify the information to feed into GENESYS. They consider external market impacts on flexibility and operations via seasonal shape of electricity price blocks; and consider regional resources, particularly hydro, responding to external markets.

Kujala described how they develop electricity price futures in the Resource Portfolio Model. They use AURORA prices as a starting point for RPM economic calculations. It looks at adequacy and its cost.

The Council also considers existing system adequacy requirements. Member Devlin remarked that there is a lot of noise about system adequacy. There are some questions about the numbers we produce and others predicting rolling blackouts, he said. We're going to hear more about this in the coming months.

Why does the Council estimate system adequacy requirements? It's a directive in the NW Power Act to assure the Pacific Northwest of an adequate, efficient, economical and reliable power supply. It's fundamental to what we do, Kujala said.

He then talked about how the Council estimates system adequacy requirements:

- The Adequacy Reserve Margin (ARM) is the amount of surplus capacity (or energy)
 needed, over the expected amount to meet the adequacy standard (in percent of
 expected load). The ARM is used in the Regional Portfolio Model to approximate the
 resource builds needed to meet the Council's adequacy standard.
- The Associated System Capacity Contribution (ASCC) is the capacity gained when a resource is added to the power supply (in percent of nameplate capacity). ASCC values are used to estimate how many new resources are needed to meet the ARM.

Kujala reminded the Council that we're focused on a loss of load probability (LOLP) of 5%. We translate our surplus capacity of what is needed to meet our standard. Reserve margin is based on meeting that standard. But that's just to meet it, he said. We're always trying to balance electricity supply and demand. That means making sure we have enough for a weather event or large economic spikes.

What are the resources that need to be built to meet it? This is often brought up and is commonly examined from a standpoint of variable resources. It may be predictable, but it's not 100% nameplate. For example, if you need 100 MW, you may need to build a 200 MW solar plant.

Member Oshie asked if the LOLP calculation is accepted in the industry. Do others use our algorithm for it?

Kujala replied that there are many ways to measure it. LOLP has been around a long time, but it's not as often used. Because we had to deal with hydro as a big part of our load, an LOLP of 5% makes sense for the Northwest, he explained. It's used by multiple utilities in the region. Our measure of reliability is unique to us, but it's well vetted, he said.

Kujala discussed how staff calculates the capacity ARM and the energy ARM, and discussed how they are applied.

Member Devlin said the original Council Meeting agenda had more items. Some delayed items will come back. They are planning for another virtual Council Meeting in April, but hopefully it won't be a webinar in May.

Many Fish and Wildlife members have been going to workshops to complete Part 1 of the Addendum. He noted an error on the website about the lamprey workshop. It will take place tomorrow online.

Council business

Northwest Power and Conservation Council Motion to Approve the Minutes of the February 11-12, 2020, Council Meeting

Vice-Chair Downen moved that the Council approve for the signature of the Vice-Chair the minutes of the February 11-12, 2020, Council Meeting held in Portland, Oregon, as presented by staff.

Member Anders second.

Motion approved without objection.

Northwest Power and Conservation Council Motion to Release the Draft Fiscal Year 2019 Report to the Governors on Bonneville's Fish and Wildlife Costs for Public Comment

John Harrison, information officer, said it's the Council's 19th year doing this. They want to release the report for 30 days of public comment. It would be released this Friday and comments would close April 24 at the end of business.

Member Devlin said the original motion says through April 17. Should it be changed? Harrison said it should.

Vice-Chair Downen moved that the Council approve the release of the draft Fiscal Year 2019 report to the Governors on Bonneville's fish and wildlife costs for a public comment period through April 24, 2020.

Member Oshie second.

Motion approved without objection.

Public comment

No one signed up to make a public comment.
Chair Devlin adjourned the meeting at 2:23 p.m.
Approved April, 2020
 Vice Chair